

COMPOSITIONS AND METHODS FOR INHIBITION AND TREATMENT OF TUMOR
ASSOCIATED ANGIOGENESIS.--

IN THE CLAIMS:

Please cancel claims 17 to 19, inclusive, without prejudice, and add the following

new claims:

¹
--20. A therapeutic composition for inhibition of tumor associated angiogenesis or for
treatment of tumor associated angiogenesis, selected from the group consisting essentially
of:

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i. an antibody which specifically binds proliferating human endothelial cells, said
antibody binding proliferating human endothelial cells selected from the group
consisting of proliferating human umbilical vein endothelial (HUV) cells and
human umbilical artery endothelial (HUA) cells and not binding cells selected
from the group consisting of non-proliferating HUV cells and non-proliferating
HUA cells, and

10 ii. an antibody-conjugate comprising an antibody and a conjugate material, said
antibody of said antibody-conjugate being an antibody which specifically binds
proliferating human endothelial cells, said antibody binding proliferating human
endothelial cells selected from the group consisting of proliferating human

15 umbilical vein endothelial (HUVE) cells and human umbilical artery endothelial
(HUAE) cells and not binding cells selected from the group consisting of non-
proliferating HUVE cells and non-proliferating HUAE cells, and said conjugate
material being selected from the group consisting of a toxin material and a
detectable label;

together with a pharmaceutically acceptable carrier.--

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--~~21~~. A composition according to claim ¹~~20~~, wherein said antibody is a monoclonal antibody.--

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--~~22~~. A composition according to claim ¹~~20~~, wherein said antibody is conjugated to a cytotoxic
material.--

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--~~23~~. A composition according to claim ³~~22~~, wherein said cytotoxic material is selected from the
group consisting of ricin A chain, diphtheria toxin, Pseudomonas exotoxin A and idarubicin.--

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--~~24~~. A composition according to claim ¹~~20~~, wherein said antibody is conjugated to a
radioisotope label.--

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--~~25~~. A composition according to claim ⁵~~24~~, wherein said radioisotope label is technetium-99m.--

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--~~26~~. A method for inhibition of angiogenesis in a patient, said angiogenesis being associated

with the growth of solid tumors, the method comprising administering to the patient an inhibition-effective amount of a therapeutic composition selected from the group consisting essentially of:

- 5 i. an antibody which specifically binds proliferating human endothelial cells, said antibody binding proliferating human endothelial cells selected from the group consisting of proliferating human umbilical vein endothelial (HUVE) cells and human umbilical artery endothelial (HUAЕ) cells and not binding cells selected from the group consisting of non-proliferating HUVE cells and non-proliferating
- 10 HUAЕ cells, and
- ii. an antibody-conjugate comprising an antibody and a conjugate material, said antibody of said antibody-conjugate being an antibody which specifically binds proliferating human endothelial cells, said antibody binding proliferating human
- 15 umbilical vein endothelial (HUVE) cells and human umbilical artery endothelial (HUAЕ) cells and not binding cells selected from the group consisting of non-proliferating HUVE cells and non-proliferating HUAЕ cells, and said conjugate material being selected from the group consisting of a toxin material and a detectable label;

20 together with a pharmaceutically acceptable carrier.--

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--27. A method for treatment of tumor associated angiogenesis in a patient, which

comprises administration to said patient of a therapeutic-effective amount of a therapeutic composition selected from the group consisting essentially of:

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- i. an antibody which specifically binds proliferating human endothelial cells, said antibody binding proliferating human endothelial cells selected from the group consisting of proliferating human umbilical vein endothelial (HUVE) cells and human umbilical artery endothelial (HUAЕ) cells and not binding cells selected from the group consisting of non-proliferating HUVE cells and non-proliferating HUAЕ cells, and
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- ii. an antibody-conjugate comprising an antibody and a conjugate material, said antibody of said antibody-conjugate being an antibody which specifically binds proliferating human endothelial cells, said antibody binding proliferating human endothelial cells selected from the group consisting of proliferating human umbilical vein endothelial (HUVE) cells and human umbilical artery endothelial (HUAЕ) cells and not binding cells selected from the group consisting of non-proliferating HUVE cells and non-proliferating HUAЕ cells, and said conjugate material being selected from the group consisting of a toxin material and a detectable label;
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together with a pharmaceutically acceptable carrier.--

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--28. A method according to claim 26 or claim 27, wherein said antibody is a monoclonal antibody.--